PROPOSAL EVALUATION

Proposition 84 Integrated Regional Water Management (IRWM) Grant Program

Implementation Grant, Round 1, FY 2010-2011

Applicant	Regional Water Authority	**Amount Requested**	$16,222,222
Proposal Title	American River Basin IRWM Implementation Program	**Total Proposal Cost**	$53,653,468

PROPOSAL SUMMARY

Fifteen projects are included in this proposal: (1) City of Roseville ASR Program – Phase 2, (2) Secret Ravine Fish Passage Improvement Project, (3) E.A. Fairbairn Groundwater Well Project, (4) Shasta Park Reservoir and Well Project, (5) Antelope Creek Water Efficiency and Flood Control Improvement Project, (6) Regional Water Meter Retrofit Acceleration Project, (7) Regional Indoor and Outdoor Water Efficiency Project, (8) Sacramento Regional County Sanitation District / Sacramento Power Authority Recycled Water Project, (9) North Antelope Booster Pump Station Project, (10) Coyle Avenue and Roseview Park Pump Stations and Treatment Systems Project, (11) Willow Hill Pipeline Rehabilitation Project, (12) Lower American River Mile 0.5 Aquatic Riparian Habitat Enhancement Project, (13) Lower Cosumnes River Floodplain Restoration Project, (14) OHWD / Rancho Murieta Groundwater Recharge Project , and (15) Sleepy Hollow Detention Basin Retrofit Project.

PROPOSAL SCORE

Criteria	Score/ Points Possible	Criteria	Score/ Points Possible
Work Plan	**15/15**	Economic Analysis – Water Supply Costs and Benefits	**9/15**
Budget	**5/5**	Water Quality and Other Expected Benefits	**6/15**
Schedule	**5/5**	Economic Analysis – Flood Damage Reduction	**3/15**
Monitoring, Assessment, and Performance Measures	**5/5**	Program Preferences	**8/10**
		Total Score (max. possible = 85)	**56**

EVALUATION SUMMARY

The following is a review summary of the proposal.

Work Plan

The criterion is fully addressed and supported by thorough and well-presented documentation and logical rationale. Organization of the work plan is well prepared and each project is presented in a consistent manner. Additionally, all projects are presented in the same organized manner detailing the project from its current level of development to completion. Sufficient detail is provided that it is clear the projects will

be implemented. For example: The application provides sections that cover the goals and objectives, purpose and need, integrated elements of projects, a regional map depicting project locations, completed work, existing data and studies, program preferences, a project map, project timing and phasing, and data and monitoring requirements. Also provided are listings of required permits, requirements for environmental compliance, listings of submitted plans and specifications, as well as the required quarterly and final reports.

Budget

The criterion is fully addressed and supported by thorough and well-presented documentation and logical rationale. All project budgets are provided with detailed cost information as described in the PSP and are consistent with the work plan and schedule. Detailed costs are provided and the costs are adequately supported by back up documentation.

Schedule

The criterion is fully addressed and supported by thorough and well-presented documentation and logical rationale. Schedules for all projects are consistent and reasonable and 3 of the projects demonstrated a readiness to begin construction by December 1, 2011. Schedule corresponds to the tasks described in the work plan.

Monitoring, Assessment, and Performance Measures

The criterion is fully addressed and supported by thorough and well-presented documentation and logical rationale. The output indicators for all projects are adequate and effective in tracking the results. Each project is provided with a table that detailed the project goals, desired outcomes, output indicators, outcome indicators, measurement tools and methods, and targets. The Proposal is consistent with the Basin Plan.

Economic Analysis – Water Supply Costs and Benefits

Above average levels of benefits relative to costs can be realized through this proposal; however, the quality of the analysis is moderate and supporting documentation is partially substantiated.

Twelve out of fifteen projects claim quantified water supply benefits of $79.41 million (M). Most of these benefits are provided by Projects 3, 4, 10 and 11. Most benefits appear to be based on the incremental cost of developing new supply in the region, about $400 per AFY. However, a source for the new water supply is not provided.

Projects 3 and 4, essentially, have the same benefits analysis. Benefits are based on increased reliability during shortage. Shortage of 30,000 AF would be reduced by 7.5 percent for each project. The estimate of $7.13 per household seems reasonable, but it is not clear that these reliability estimates are appropriate for the City of Sacramento. The California Urban Water Conservation Council has estimated that metered water use can be expected to reduce water use by 20%. Where meters are not installed, the marginal cost of reducing water use is near zero for the users.

Benefits of the Project 9 are based on increased reliability during shortage. Shortage of 28,000 AFY would be reduced by 5.7 percent. The estimate of $5.42 per household seems reasonable, but it is not clear that these shortage or reliability estimates are appropriate for San Juan Water District.

For Project 15, 1,120 AFY of water would be saved annually. Two benefits are claimed; the avoided cost of water saved, and "treatment and transmission costs of the existing losses will be recouped." This appears to be a double count. On page 108, the $400/AF cost of water includes treatment and distribution.

Project 14 will store up to 4,000 AFY for use during dry periods or peak demand. Benefits are based on the costs of an alternative recycled water project that provides high reliability; costs of this project may be understated.

Project 11, would expand the purposes of the Sleepy Hollow Detention Basin beyond flood control to include water recharge, recreation, and habitat. The application states that dry wells "will be evaluated…", but it is unclear if they will actually be built. Benefits are cost savings from providing 50 AF of groundwater instead of surface water.

Water Quality and Other Expected Benefits

Only below average levels of benefits relative to costs can be realized through this proposal, as demonstrated by the analysis and supporting documentation. Total quantified water quality and other benefits are $1.46 M. These benefits are provided by Projects 2 and 13. Project 2 benefits are salmon habitat benefits from stated preference methods. The benefit is based on 26 salmon at $1,107 per fish. The number of fish is apparently based on the number needed to approximately equate benefits and costs. Benefits of the Lower Cosumnes River Floodplain Restoration Project are estimated similarly. Other water quality benefits that are not quantified, but are described qualitatively include; improved ability to provide flows in the American River, reduced wastewater discharges, improved water quality for potable uses, and habitat improvement.

Economic Analysis – Flood Damage Reduction

Only low levels of benefits relative to costs can be realized through this proposal, as demonstrated by the analysis and supporting documentation. Total quantified flood damage reduction claimed benefits are $95,000 provided by Project 5. For the Antelope Creek Water Efficiency and Flood Control Improvement Project, expected annual damages (EAD) are estimated to be $12,000. Using data presented in Table 4, the reviewer finds the EAD to be $6,000 instead of $12,000, as reported. The NPV of benefits are very small relative to total costs in any case. The potential flood damage reduction benefits of other projects appear to be very small, or they are not well-documented.

Program Preferences

The criterion is fully addressed but is not supported by thorough documentation or sufficient rationale. The Proposal addresses Program Preferences and demonstrated a significant degree of certainty that the Program Preference claimed will be achieved; and thoroughly documents the breadth and magnitude of the Program Preference to be implemented. The Proposal addresses the following Program Preferences: Drought preparedness, Use and reuse water more efficiently, Expand environmental stewardship, Protect surface water and groundwater quality, Practice integrated flood management, Climate change response actions, Include regional projects or programs, Attainment of objective from CALFED Bay-Delta Program, Effectively integrate water management programs. However, the Proposal does not meet the Program Preference for critical water supply or water quality needs of a Disadvantaged Community (DAC) because the two claimed DAC projects are regional in nature and do not provide targeted benefits to a DAC.